Page 3, please delete the second full paragraph, and replace it with the following new paragraph:

According to the invention, this object is achieved by the device for compressing a list of destination addresses of a multicast message, the method for compressing a list of destination addresses of a multicast message, the router of a communications network, and the host of a communications network.

Page 4, please delete the third and fifth full paragraphs.

Page 5, please delete the first, third, fifth and seventh full paragraphs.

Page 6, please delete the first full paragraph, and replace it with the following new paragraph:

The above mentioned and other objects and features of the invention will become more apparent and the invention itself will be best understood by referring to the following description of an embodiment taken in conjunction with the accompanying drawing Fig. 1 which is a scheme of an Internet INTERNET wherein the method for compressing a list of destination addresses of a multicast message according to the present invention is implemented.

Page 6, please delete the second full paragraph, and replace it with the following new paragraph:

In Fig. 1, four hosts, H1, D1, D2 and D3, and three routers, R1, R2 and R3, of the Internet INTERNET are drawn. Host H1 is connected to a port of the first router R1 via link L11. The ports R1P1 and R1P2 of the first router R1 are interconnected with ports of respectively the second router R2 and the third router R3 via respectively the link L12 and the link L13. Link L21 connects port R2P1 of the second router R2 to a port of the host D1. Similarly, link L22 connects port R2P2 of the second router R2 to a port of host D2 and link L33 interconnects port R3P1 of router R3 with a port of host D3. As is indicated on Fig. 1, host D1 has address A.B.C.D, host D2 has address A.B.C.E and host D3 has address A.F.G.H. In these addresses, each letter is supposed to represent an octet so that each address consists of 32 bits (4 octets). Host H1 will play the role of sourcing host in the example described below so that its address does not need to be known in order to be able to illustrate the compression method according to the present invention. Host H1 and the three routers R1, R2 and R3 are supposed to incorporate a destination list compression device according to the present invention.

Please delete the paragraph bridging pages 6 and 7, and replace it with the following new paragraph:

To explain the invented compression technique it is supposed that host H1 has to multicast an IP (Internet Protocol) datagram to the destination hosts D1, D2 and D3 and thereto applies connectionless multicasting. In the overhead section of this IP datagram, host H1 thus has to

identify the destination hosts D1, D2 and D3 by their respective IP addresses A.B.C.D, A.B.C.E and A.F.G.H. The destination list compression device in host H1 will aid to realize this with low overhead consumption. The destination list compression device in host H1 detects that the addresses A.B.C.D and A.B.C.E of respectively host D1 and host D2 hove a common prefix A.B.C. By subtracting this common prefix A.B.C from the addresses A.B.C.D and A.B.C.E, the compression device obtains the suffixes D and E which it uses to generate a suffix list {D,E}. This suffix list {D,E} is added to the common prefix A.B.C to constitute a compound address A.B.C{D,E} that still indicates that the two hosts D1 and D2 belong to the destinations of the IP datagram but which contains only 5 octets, i.e., A, B, C, D and E, instead of the 8 octets, A, B, C, D, A, B, C and E, that have to be embedded in the IP datagram overhead if no compression is applied. As a result of the first iteration step in the compression method, host H1 obtains a list of destination addresses for the IP datagram to be multicasted that consists of the IP address A.F.G.H and the compound destination address A.B.C{D,E}. In a second iteration step, the compression device in host H1 detects that the IP address A.F.G.H and the compound address A.B.C{D,E} still have a common prefix A. By subtracting this common prefix A from the IP address A.F.G.H and the compound address A.B.C{D,E}, the compression device of host H1 generates the suffixes F.G.H and B.C{D,E} from which the list of suffixes {B.C{D,E},F.G.H} is constituted. This list of suffixes {B.C{D,E},F.G.H} is added to the common prefix A to generate a new compound address A{B.C{D,E},F.G.H} that indicates that the IP datagram has to be multicasted to the destination hosts D1, D2 and D3, but which thereto occupies only 8 octets, i.e., A, B, C, D, E, F, G, H, instead of the 12 octets, A, B, C, D, A, B, C, E, A, F, G and H, that would have been embedded in the overhead section of the IP

4